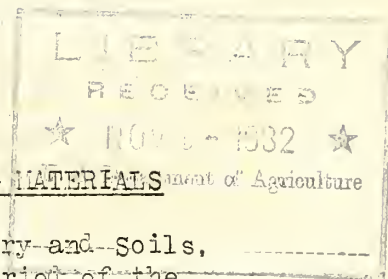


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CHEMISTS SERVE PRODUCERS AND USERS OF TANNING MATERIALS Department of Agriculture

A radio talk by F. P. Veitch, Bureau of Chemistry and Soils, delivered in the Department of Agriculture period of the National Farm and Home Hour, Friday, October 28, 1932, by a network of 48 associate NBC radio stations.

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SALISBURY:

Dr. Henry G. Knight, the Chief of the Bureau of Chemistry and Soils, is not able to talk with us today, continuing his series of reports to the Farm and Home Hour audience on the recent results of Government chemical research into numerous problems of the farming industries.

Dr. Knight was to tell us today about research on tanning materials, and has asked Dr. F. P. Veitch, in charge of this work, to take his place on the program.

Now tanning materials are absolutely essential to the operation of our big leather industry. Did you know that the leather industry of the United States is the biggest in the world? We turn out a third of the world's total output of leather. Each of us Americans wear more shoes in a year than the individual citizen of any other country. Leather is big business, totalling two billions worth of finished leather goods a year. Leather also means income to every farmer who sells a hide or a cord of tan bark. But that latter is part of Dr. Veitch's story. Ladies and gentlemen, may I present Dr. F. P. Veitch.

VEITCH:

Thank you, Salisbury, and most cordial greetings to you people who are listening to the Farm and Home Hour program today. If you do not remember a word I say I want you to remember what Salisbury has told you about the importance of leather to our people. I'll do my best to tell you the story of the research work on tanning materials as Dr. Knight would tell it to you if he were here.

In spite of Salisbury's explanation, I shouldn't be surprised if some of you are wondering why the Government conducts research on tanning materials. Well, here's the explanation:

We couldn't have any leather industry, we couldn't have the best possible foot covering unless we had tanning materials. Now you can use a number of materials, each of them quite unlike any other, in tanning leather. But they all fall into one of two general types. One type is the vegetable tanning materials derived from various kinds of trees and plants. Our tanners use about 25 million dollars worth of such vegetable products each year. The other important class of tanning agents includes the various compounds of chromium which tanners use in making chrome leather. Your shoes are a rather interesting everyday, two-in-one illustration of these types of leather. The uppers of most shoes are made of chrome tanned leather, and the bottoms -- or the outsoles and insoles -- are made of vegetable tanned leather. Now let's get back to why we conduct research on tanning materials:

(over)

It is an important economic fact that we get half our vegetable tanning materials from foreign countries. Even more important is the fact that about two-thirds of our domestic supply of tanning materials comes from one source -- the wood of the American chestnut tree. As most of you know, the blight disease is exterminating the chestnut. Probably within the next 10 or 15 years the blight will have killed most of the virgin chestnut timber in this country.

Now do not be alarmed at these facts. I can assure you there is no danger that our tanneries will have to close down immediately because they can't get an adequate supply of vegetable tanning materials. No, the reason these facts are important is that they clearly show the need for research on tanning materials to meet our future needs. We must have in the near future new supplies of tanning materials, including an ample quantity of domestic, vegetable tanning materials which will provide the different tannins needed by our leather industry to impart to different kinds of leather the properties that characterize them. We are trying to find new sources of tanning materials among the plants now grown in this country; also we are bringing from other countries plants containing tannin.

Of the latter project, I shall simply say that we are cooperating with the Bureau of Plant Industry by testing out the tanning properties and value of the blight resistant chestnut, oak and related trees of the Far East. This work is in connection with the search that the Department of Agriculture is making for foreign chestnut and similar trees to replace our native chestnuts. Plant explorers have already sent us more than 200 specimens of wood and bark from foreign countries, many of them high in tannin.

Now a word about the results of our research which aims to find new supplies of tanning materials in our native plants.

We have found that the part of the tree richest in tannin is the stump, which is ordinarily left in the woods to rot. Under favorable conditions it is profitable to salvage the stumps. We have shown that the sumac plant of the eastern United States is among our richest domestic tanning materials and that with greater care in handling and curing it is nearly equal to Sicilian Sumac for many purposes.

We're all the time considering and examining miscellaneous domestic plant materials such as barks, woods, wastes from mill operations, and weeds with the thought that some of them may prove to be capable of profitable development into new commercial sources of tannin and thus furnish our leather industry with an adequate domestic supply of tanning materials, and our farm people with a new source of income.

For example, just now our Bureau is making a very careful and exhaustive survey of the possibilities of using the waste hemlock bark and other barks of the Pacific Coast region as a new commercial source of tannin. Great quantities of hemlock bark go to waste every year in connection with large lumbering and pulp production operations in the far Northwest. In the year 1930 more than 250 thousand cords of hemlock bark were taken from the logs cut for lumber in the States of Washington and Oregon alone. This bark would yield tanning extract worth around 2-1/2 million dollars at current prices.

But the question is, can a business man make a profit producing extracts from this hemlock bark? The object of our study is to furnish the facts to answer this question. If the facts show that such an industry would be a paying one, we may look for Pacific Coast people to enter it and to convert what is now a waste of forestry into a useful, valuable product.